CONNECTICUT DEPARTMENT OF CORRECTIONS OFFENDER POPULATION PROJECTIONS
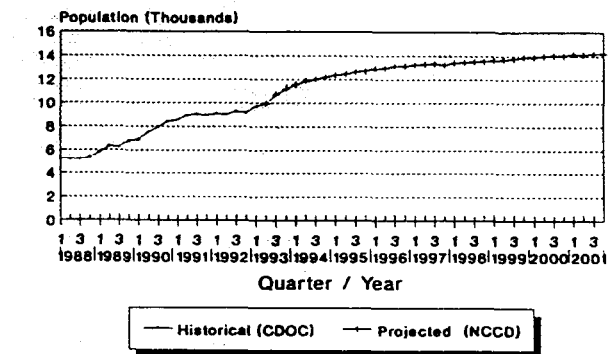
FIGURE F
CDOC PRISON POPULATION
SENTENCED INMATES

Population (Thousands)

Quarter / Year

─── Historical (CDOC)   ─┼─ Projected (NCCD)

Source: Connecticut DOC / NCCD Prophet

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SCOPE

This report presents the results of projections of the sentenced prison and community populations under the supervision of the Connecticut Department of Corrections (CDOC). The projections were produced by the National Council on Crime and Delinquency (NCCD) using NCCD's PROPHET simulation software, and were based on data supplied by CDOC personnel. The projections contained in this report are broken out into ten distinct offender groups, and six sentence levels within each group. In addition, the model was also designed to produce separate projections for male and female inmates.

BACKGROUND

The simulation model begins to project offender populations in January of 1992. The sentenced population confined in state facilities and the population in the various community programs during that month represent the-base population for the forecast. Projected new court commitments are entered into the model. Parole revocations are generated internally to the model based on revocation data supplied by CDOC staff. The movement of offenders into, out of, and between prison and the community programs is simulated by the model to generate population forecasts through the year 2001. In particular the simulation enacts the elimination of the Supervised Home Release (SHR) program after July 1, 1993, and shows the impact of this change in policy for both the facilities and the community offender populations. The prison population projected does not include unsentenced individuals housed in the state correctional facilities.

FINDINGS

- The CDOC sentenced inmate population can be expected to increase to 12,489 by the end of fiscal year 1995 and to 14,123 by the year 2001, if admissions remain at the level reached during calendar year 1991 (9,745 new court commitments) and proposed policies to eliminate SHR after July 1, 1993, are implemented. (Please refer to table 1 following this summary.)

- Compared to June 1992 levels, these figures represent a growth of 3,465 (+38 percent) inmates by June 1995 and 5,099 (+52 percent) inmates by the end of fiscal year 2001.

- This growth in the incarcerated population is due in large part to two factors: first, because of a recent trend showing an increase in the number of new admissions for violent offenses serving longer sentences; second, because of policy changes, to be implemented in July 1993, affecting the length of stay of inmates in prison and the type of community release programs where they are sent to complete their sentences.

- Beginning in July of 1993, the elimination of SHR will result in an average of 700 inmates a year being released to other CDOC approved community programs. Overall, the total community population will decrease to under 3,000 by June 1994.

- The male prison population is projected to increase by 34 percent from June 1992 to June 1995 and by 53 percent by June 2001 reaching 13,000 inmates that year. (please refer to exhibit A following this summary)

- The female population is also projected to increase over the first period, then stabilize to a level between 1,050 and 1,150 inmates from 1995 to 2001.

- The difference in the results for these two sub-groups can be explained by the fact that males on average receive longer sentences than do females, and are therefore more affected by policy changes determining length of stay in prison.

The projections in this report are based on four critical assumptions:

1. No growth, and no decrease, in the number of new court commitments from the CY 1991 number of 9,745.

2. Specific policy changes will be applied after July 1, 1993 to eliminate SHR.

3. Projections are based on the assumption that current sentencing policies (i.e., imposed sentences) will continue into the future.

4.   The computerized data supplied by CDOC personnel accurately reflect the current policies and practices that affect sentencing, admission and release trends from the prison and parole system of the state.

TABLE 1
CDOC HISTORICAL AND PROJECTED SENTENCED POPULATION
1988-2001

MONTH/YEAR	FACILITIES		COMMUNITY		TOTAL SUPERVISED	
	N	% CHANGE	N	% CHANGE	N	% CHANGE
HISTORICAL						
JUNE 1988	5,205	NA	2,595	NA	7,800	NA
JUNE 1989	6,319	21.4%	4,192	61.5%	10,511	34.8%
JUNE 1990	7,505	18.8%	6,432	53.4%	13,937	32.6%
JUNE 1991	8,947	19.2%	6,627	3.0%	15,574	11.7%
JUNE 1992	9,024	0.9%	6,049	-8.7%	15,073	-3.2%
PROJECTED						
JUNE 1993	10,003	10.6%	4,363	- 27.9%	14,366	-4.7%
JUNE 1994	11,859	18.6%	2,917	-33.1%	14,776	2.9%
JUNE 1995	12,489	5.3%	2,848,	-2.4%	15,337	3.8%
JUNE 1996	12,989	4.0%	2,751	- 3.4%	15,740	2.6%
JUNE 1997	13,301	2.4%	2,739	-0.4%	16,040	1.9%
JUNE 1998	13,458	1.2%	2,744	0.2%	16,202	1.0%
JUNE 1999	13,684	1.7%	2,787	1.6%	16,471	1.7%
JUNE 2000	13,999	2.3%	2,770	-0.6%	16,769	1.8%
JUNE 2001	14,123	0.9%	2,845	2.7%	16,968	1.2%

NOTE: PROJECTIONS ASSUME A CONSTANT ADMISSION OF SENTENCED INMATE?

SOURCE: HISTORICAL DATA - CDOC
        PROJECTIONS - NCCD (PROPHET)-

SAMPLE   PROPHET   OUPUT

TOTAL PRISON POPULATION

YEAR	MARCH	JUNE	SEPTEMBER	DECEMBER
1992	8,866	9,185	9,254	9,598
1993	9,814	10,003	10,728	11,215
1994	11,584	11,859	12,028	12,208
1995	12,365	12,489	12,638	12,745
1996	12,912	12,989	13,117	13,142
1997	13,245	13,301	13,355	13,238
1998	13,401	13,458	13,530	13,573
1999	13,645	13,684	13,792	13,874
2000	13,908	13,999	14,049	14,064
2001	14,172	14,123	14,222	14,227

MALE PRISON POPULATION

YEAR	MARCH	JUNE	SEPTEMBER	DECEMBER
1992	8,249	8,499	8,519	8,783
1993	8,954	9,124	9,718	10,119
1994	10,454	10,721	10,890	11,080
1995	11,220	11,350	11,509	11,586
1996	11,753	11,850	11,989	12,050
1997	12,128	12,179	12,252	12,132
1998	12,306	12,356	12,444	12,490
1999	12,575	12,627	12,733	12,813
2000	12,868	12,929	12,958	12,969
2001	13,051	13,001	13,109	13,138

FEMALE PRISON POPULATION

YEAR	MARCH	JUNE	SEPTEMBER	DECEMBER
1992	617	686	735	815
1993	860	879	1,010	1,096
1994	1,130	1,138	1,138	1,128
1995	1,145	1,139	1,129	1,159
1996	1,159	1,139	1,128	1,092
1997	1,117	1,122	1,103	1,106
1998	1,095	1,102	1,086	1,083
1999	1,070	1,057	1,059	1,061
2000	1,040	1,070	1,091	1,095
2001	1,121	1,122	1,113	1,089

I.   INTRODUCTION

The National Council on Crime and Delinquency (NCCD) has developed an inmate population projection model for the Connecticut Department of Corrections (CDOC). In addition to providing long range population projections of offender subgroups, the model is particularly useful in assessing the probable impacts of policy options on future bed space needs. Initial base projections of the prison and parole populations and accompanying supporting documentation are included in this report. The forecasts represent a simulation of current sentencing and administrative policies and practices through the end of calendar year 2001, and have been developed with the close cooperation of CDOC planning and data processing personnel.

This report contains projections of the incarcerated sentenced population. Also projected are the populations of various community release programs run by CDOC: Furlough, Halfway House, Parole, and Supervised Home Release (SHR).

II. BACKGROUND

Over the last ten years there have been significant changes in sentencing and correctional policy in the state of Connecticut. In 1981, parole was abolished and the state adopted a determinant sentencing approach to housing convicted felons. Under this determinant sentencing structure, it was not uncommon for non-violent inmates to be moved to community supervision after serving only 10 percent of imposed sentences. In 1989, legislation was

enacted which re-institutes the use of discretionary parole release
after inmates have served one half of imposed sentences. The most
significant provisions of the resulting policies are as follows:

- After July 1, 1993, no one is to be released
  to SHR.

- After July 1, 1993, persons serving sentences
  of one year or less will serve 50 percent of
  their sentence behind bars, less good time,
  before- release to a DOC approved community
  program.

- After July 1, 1993, the parole board will hear
  90 percent of the cases where persons have
  effective sentences greater than one year
  after they have served 50 percent of their
  sentence. Parole will be granted to 70
  percent of those eligible.

III. TEE DEVELOPMENT OF A PROJECTION

NCCD's approach to the project was to produce a base model
incorporating all the policy changes effective July 1, 1993. This
section provides a brief description of the projection methodology,
model assumptions and the resulting forecast of the Connecticut DOC
sentenced inmate and community populations.

A.   NCCD SIMULATION MODEL

NCCD's "PROPHET" projections software was used to forecast the
future sentenced inmate and community populations in Connecticut.
This computerized simulation model mimics the flow of offenders
through the state's prison, parole and other community release
programs over a ten year forecast horizon. Currently the NCCD
simulation and projection approach is used in over 20 states.

In technical terms, the model is an example of a "stochastic entity" simulation model. It is stochastic, or probabilistic, in the sense that random numbers are used in the program to assign values to factors which impact the time an individual will spend in' prison, and in a community program. The model is an entity simulation model based on Monte Carlo simulation techniques in the sense that it is conceptually designed around the legislative and administrative processes that govern the systematic flow of individual cases through prison, community and possible re-entry into prison.

The model projects populations and movements between, into and out of the DOC populations based on key assumptions relating to such areas as the growth in admissions, parole release probabilities, community revocation rates, and current administrative policies. If the model is loaded with accurate data, it will "mimic" the actual flow of cases through the correctional system. Individual offenders are simulated one-by-one with important parameters drawn from data supplied by state officials. The model traces the progress of each case until it exits from the system. By accumulating the experiences of a large number of cases across time, the model replicates the performance of the correctional system.

This model was loaded with data reflecting important sentencing characteristics of inmates admitted and released from DOC facilities and community programs during 1991, and of existing populations on January 1, 1992. A forecast of the current inmate

population was executed which projected the population over a ten year forecast horizon under the assumption that there would be no changes in current policies. The model begins to forecast the DOC offender populations in January 1992 and all future new commitments from courts are assumed to "look like" 1991 prison admissions. The total number of future annual new commitments projected to enter prison is also assumed to remain the same over the projection horizon.

B.   PROJECTED OFFENDER ID GROUPS

The simulation model allows analysts to divide the correctional population into a series of offender sub-categories. In PROPHET these sub-categories are referred to as "Prisoner ID Groups". They represent categories of inmates that are meaningful to policy makers and are similar in the way they are processed through the correctional system. These groups are mutually exclusive categories (no single offender is placed in more than one group).

The model developed for Connecticut allows analysts to simulate the movement of 10 separate offender categories for both males and females through the system based on current sentencing data. The categories were obtained by making use of variables on the data files supplied by CDOC identifying the primary-offense committed. The groups are as follows:

- Person felony
- Person misdemeanor
- Property felony
- Property misdemeanor

- Substance abuse felony
- Substance abuse misdemeanor
- Public offense felony
- Public offense misdemeanor
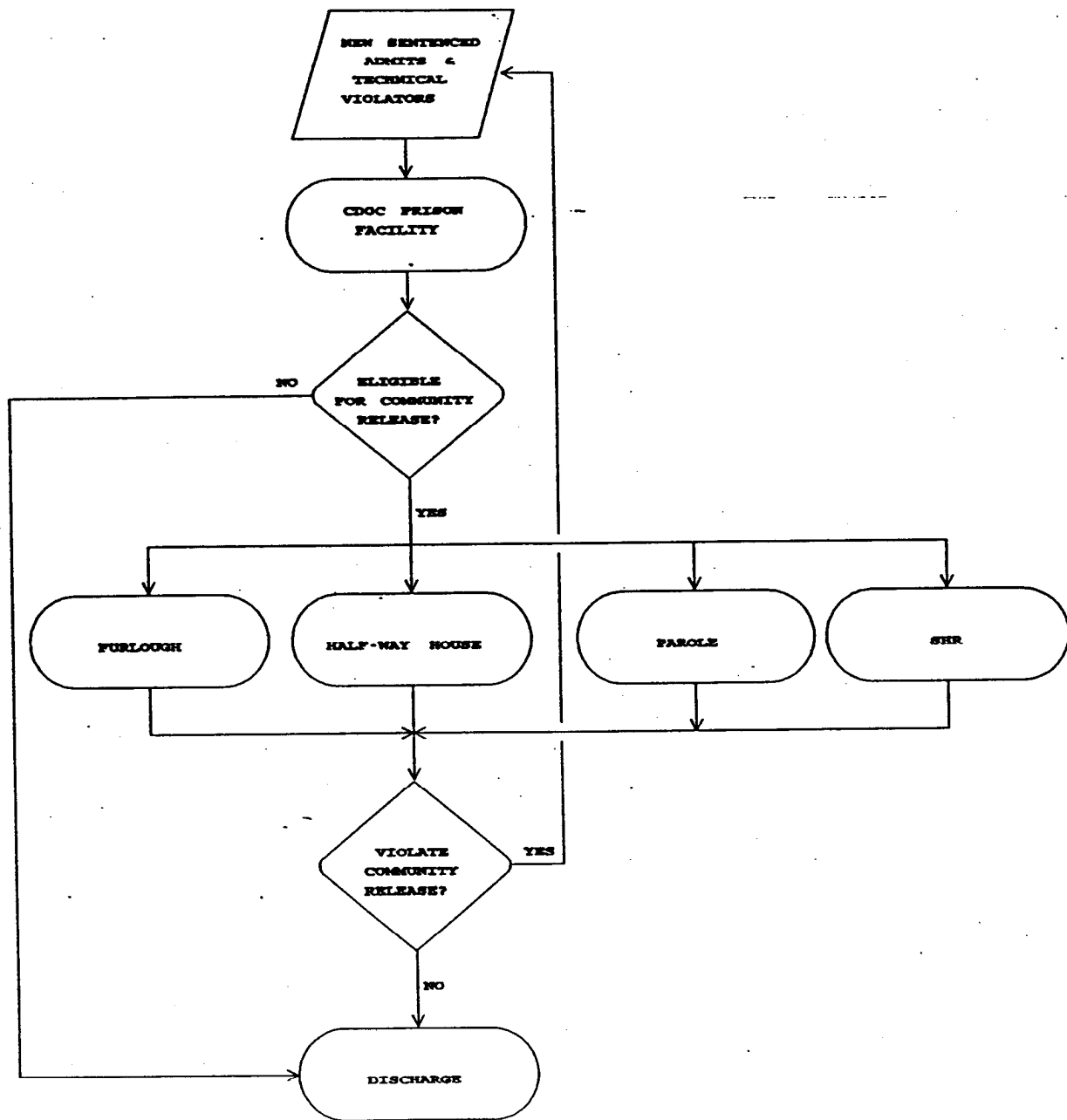- Unclassified
- Probation violators

C.   PROJECTED OFFENDER STATUSES

Movements within PROPHET are determined by changes in statuses: the location of felons within the correctional system are determined by their "Prisoner Status" in the simulation model. As a result, each inmate in PROPHET is fully identified by the Prisoner "ID/STATUS" combination held at any point in time. The 33 different statuses in the Connecticut simulation model reflect the complexity of this correctional system. 'The flow chart on the next page illustrates the logic that determines all the possible paths a case can go through and the status held at each stage before exiting from the system.   In this chart, one can see that the additional information provided by the "Prisoner Status" is to identify the different release mechanisms within the CDOC system. In addition, the status of an offender while incarcerated further breaks out inmates by sentence type into the following groups:

LONGMAND: Mandatory sentences of more than 1 year.
LONGNORM: Non-mandatory sentences of more than 1 year.
MEDIMAND: Mandatory sentences for 2 months to 1 year.
MEDINORM: Non-mandatory sentences for 2 months to 1 year.
SHORMAND: Mandatory sentences for less than 2 months.
SHORNORM: Non-mandatory sentences for less than 2 months.

This classification enables the user to quantify the effects of policy changes such as the elimination of SHR selectively by sentence type.

CDOC CORRECTIONAL SYSTEM FLOW DIAGRAM

MEN SENTENCED
ADMITS &
TECHNICAL
VIOLATORS

CDOC PRISON
FACILITY

ELIGIBLE
FOR COMMUNITY
RELEASE?

NO

YES

FURLOUGH

HALF-WAY HOUSE

PAROLE

SHR

VIOLATE
COMMUNITY
RELEASE?

YES

NO

DISCHARGE

Tables 3A and 3B, on the following page, show the 60 possible resulting "ID/STATUS" combinations describing the incarcerated CDOC population. To simplify the model without affecting the accuracy of the projections, short sentences were grouped into a single "SHORT" status.

IV.   INMATE CHARACTERISTICS

The following section makes use of graphs and tables to summarize the data obtained from the various data files supplied by CDOC personnel. In addition to illustrating the characteristics of the correctional population, this section presents the data in the way that it was loaded into the Connecticut PROPHET model.

Of the 9,745 new court commitments to the Connecticut correctional facilities, 90 percent were male and 10 percent were female.   In the existing prison population, the proportion of females is even less at under 6 percent of the total population. Figures A and B on the following pages show the difference in offense profiles between the new sentenced admissions and the existing inmate populations.   The number of new commitments with misdemeanor offenses (43 percent) is about the same as the number entering the system with felony offenses (44 percent), the remaining 13 percent being composed of probation violators and unclassified offenses. In contrast, the existing inmate population is primarily comprised of felon offenders (82 percent), and only 6 percent misdemeanants. This contrast simply reflects the fact that felons have to serve longer sentences for their offenses than do

TABLE 3A
SENTENCE LENGTHS FOR 1991 MALE ADMISSIONS
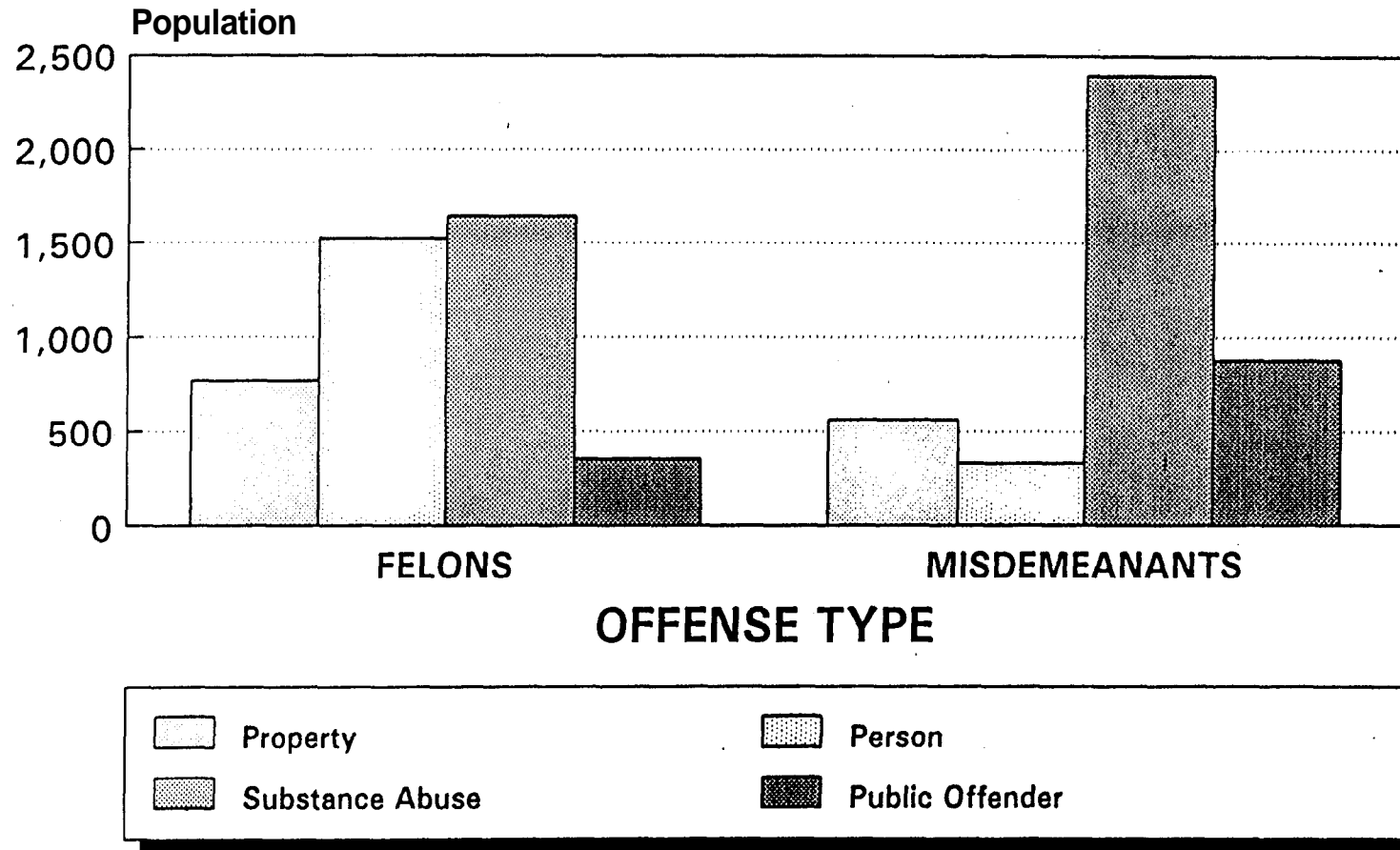## CY 1991

OFFENSE TYPE	LONGMAND		LONGNORM		MEDIMAND		MEDINORM		SHORMAND		SHORNORM	
	N	SENTENCE (mos)	N	SENTENCE (mos)	N	SENTENCE (mos)	N	SENTENCE (mos)	N	SENTENCE (mos)	N	SENTENCE (mos)
PERSON FEL.	179	148.3	596	131.5	21	11.1	111	9.9	0	NA	3	0.3
PERSON MISD.	2	24.0	40	28.5	3	11.0	222	7.9	0	NA	45	0.7
PROPERTY FEL.	0	NA	514	40.9	0	NA	185	9.7	0	NA	5	0.6
PROPERTY MISD.	6	29.0	34	23.0	12	6.7	269	5.1	13	0.6	126	0.8
SUBSTANCE ABUSE FEL.	7	80.6	1,207	41.9	0	NA	213	10.1	0	NA	11	0.5
SUBSTANCE ABUSE MISD.	1	24.0	10	24.6	72	4.1	238	4.6	299	1.0	1,610	0.1
PUBLIC OFFENDER FEL.	47	55.2	161	39.9	29	11.8	72	9.8	1	1.0	6	0.7
PUBLIC OFFENDER MISD.	0	NA	39	30.3	0	NA	311	5.7	0	NA	388	0.7
UNCLASSIFIED	0	NA	154	61.5	0	NA	61	8.6	0	NA	11	0.6
PROBATION VIOLATORS	0	NA	431	35.8	0	NA	465	7.5	0	NA	101	0.7
OVERALL	242	123.7	3,186	58.0	137	7.2	2,149	7.3	313	1.0	2,308	0.3

TABLE 3B
SENTENCE LENGTHS FOR 1991 FEMALE ADMISSIONS
CY 1991

OFFENSE TYPE	LONGMAND		LONGNORM		MEDIMAND		MEDINORM		SHORMAND		SHORNORM	
	N	SENTENCE (mos)	N	SENTENCE (mos)	N	SENTENCE (mos)	N	SENTENCE (mos)	N	SENTENCE (mos)	N	SENTENCE (mos)
PERSON FEL.	4	48.0	48	45.4	0	NA	13	10.5	0	NA	2	0.5
PERSON MISD.	0	NA	2	33.0	0	NA	12	8.1	0	NA	3	0.3
PROPERTY FEL.	0	NA	42	33.6	0	NA	18	9.7	0	NA	1	NA
PROPERTY MISD.	0	NA	16	24.5	0	NA	57	4.5	0	NA	25	0.7
SUBSTANCE ABUSE FEL.	2	60.0	165	35.6	0	NA	36	9.6	0	NA	2	NA
SUBSTANCE ABUSE MISD.	1	30.0	1	27.0	3	3.3	15	4.3	25	1.0	112	0.1
PUBLIC OFFENDER FEL.	0	NA	24	32.8	1	12.0	10	8.4	0	NA	0	NA
PUBLIC OFFENDER MISD.	0	NA	8	21.6	0	NA	91	6.4	0	NA	42	0.8
UNCLASSIFIED	0	NA	10	32.1	0	NA	8	7.6	0	NA	1	NA
PROBATION VIOLATORS	0	NA	67	30.3	0	NA	75	7.6	0	NA	6	0.5
OVERALL	7	48.9	383	36.6	4	5.5	335	7.1	25	1.0	194	0.4

Source: CDOC 1991 Sentence Admission data

FIGURE A
CDOC SENTENCED ADMISSIONS
CY 1991

Population

FELONS   MISDEMEANANTS

OFFENSE TYPE

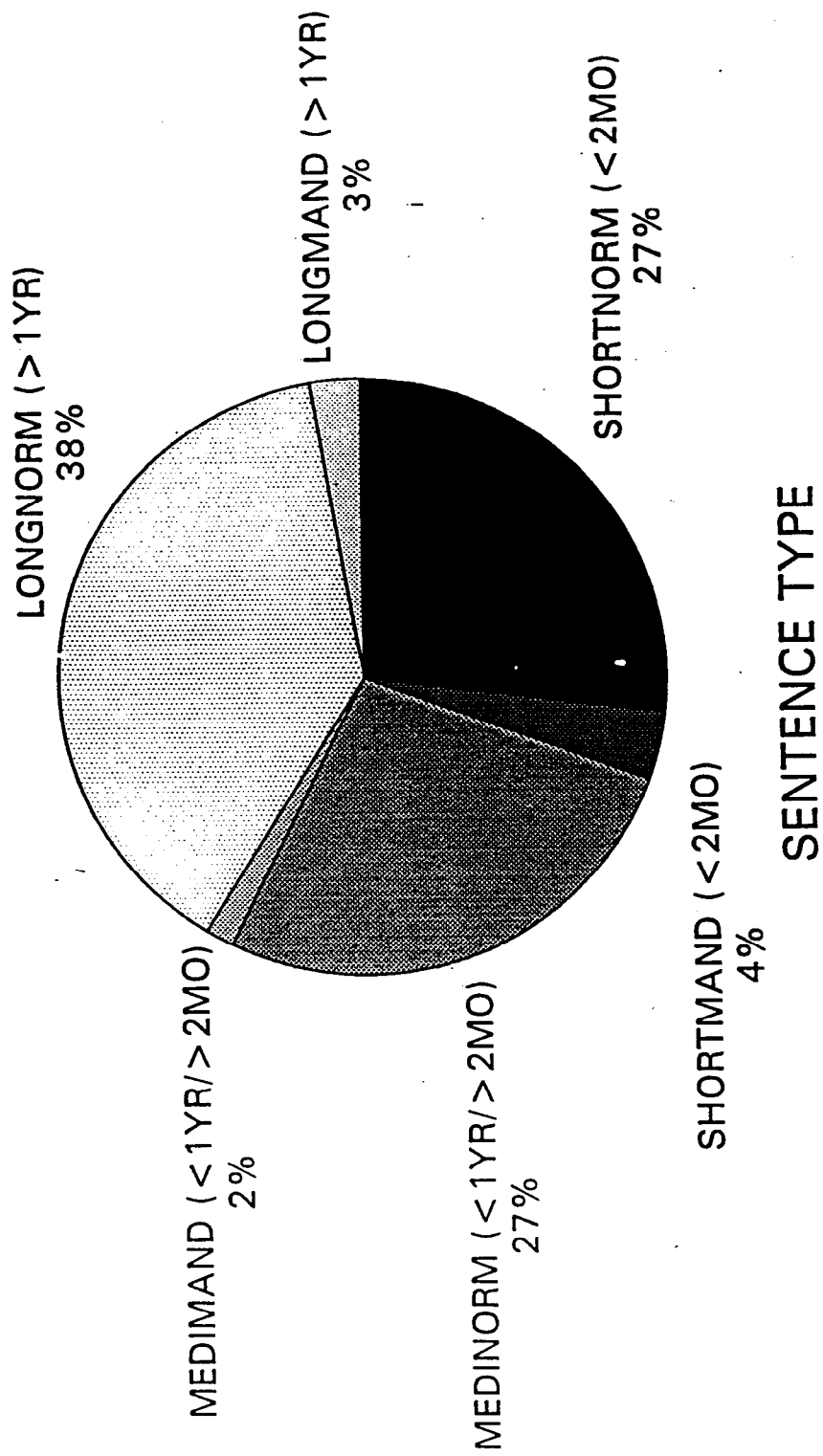|	
☐ Property	▨ Person
▨ Substance Abuse	■ Public Offender

F I G U R E   B
CDOC SENTENCED INMATE POPULATION
1/1/92
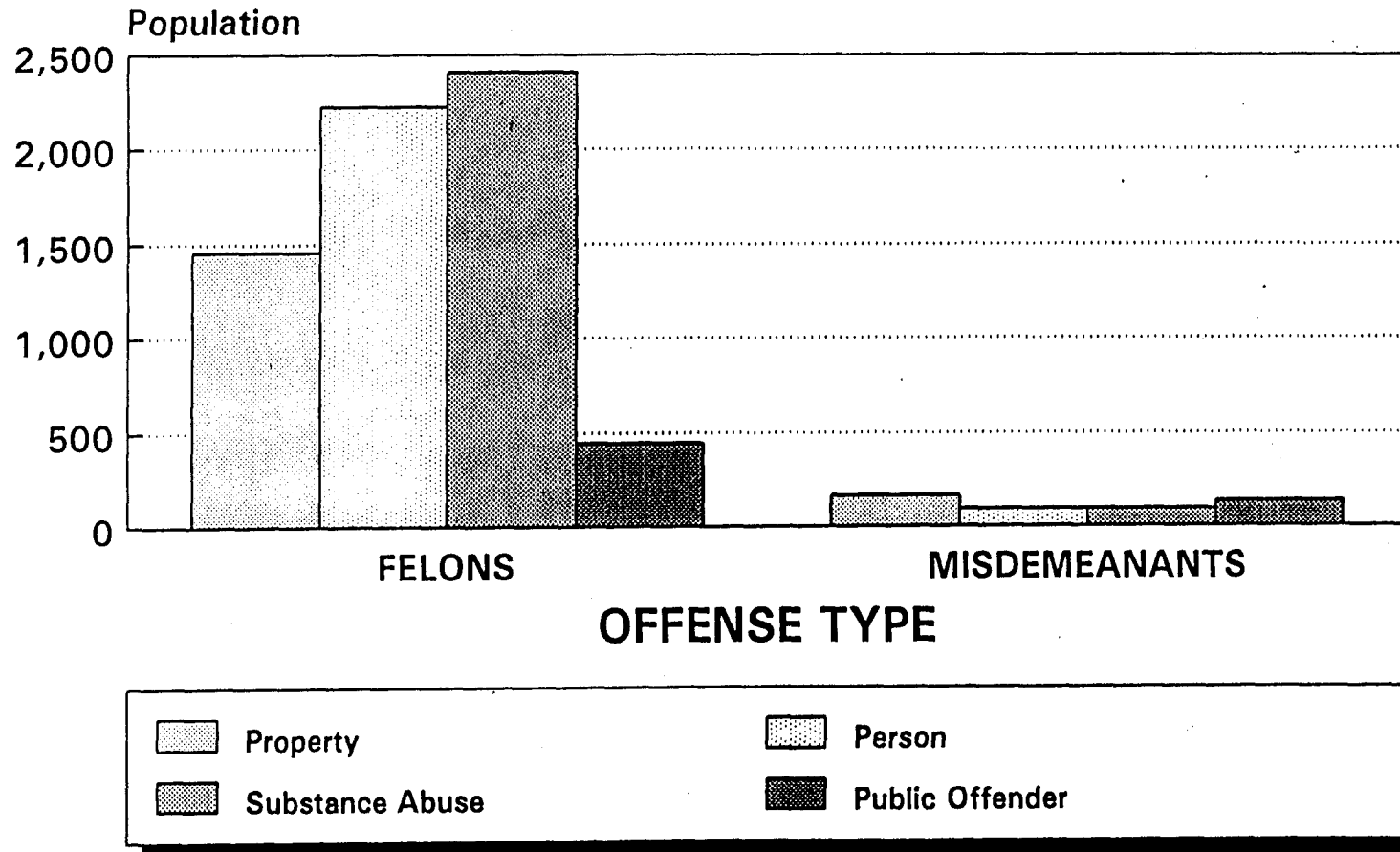
misdemeanants, and therefore represent a greater proportion of the average daily population.

Length of stay data (LOS) were entered into PROPHET according to the type and length of sentences ("PID/Status" combinations). For the existing incarcerated population, and the new admissions, this meant classifying prisoners by sentence type. Figures C and D that follow illustrate the results of this classification. Among the new admissions in 1991, less than 10 percent received mandatory sentences, and while inmates with sentences of a year or more were the greatest in number, the number of medium and short sentence admissions were not much fewer. This is in contrast to the existing inmate population on 1/1/92, where the vast majority of inmates (94 percent) are serving long sentences; as with the admission cohort though, less than 10 percent of the inmates were serving mandatory sentences the day the census was taken.
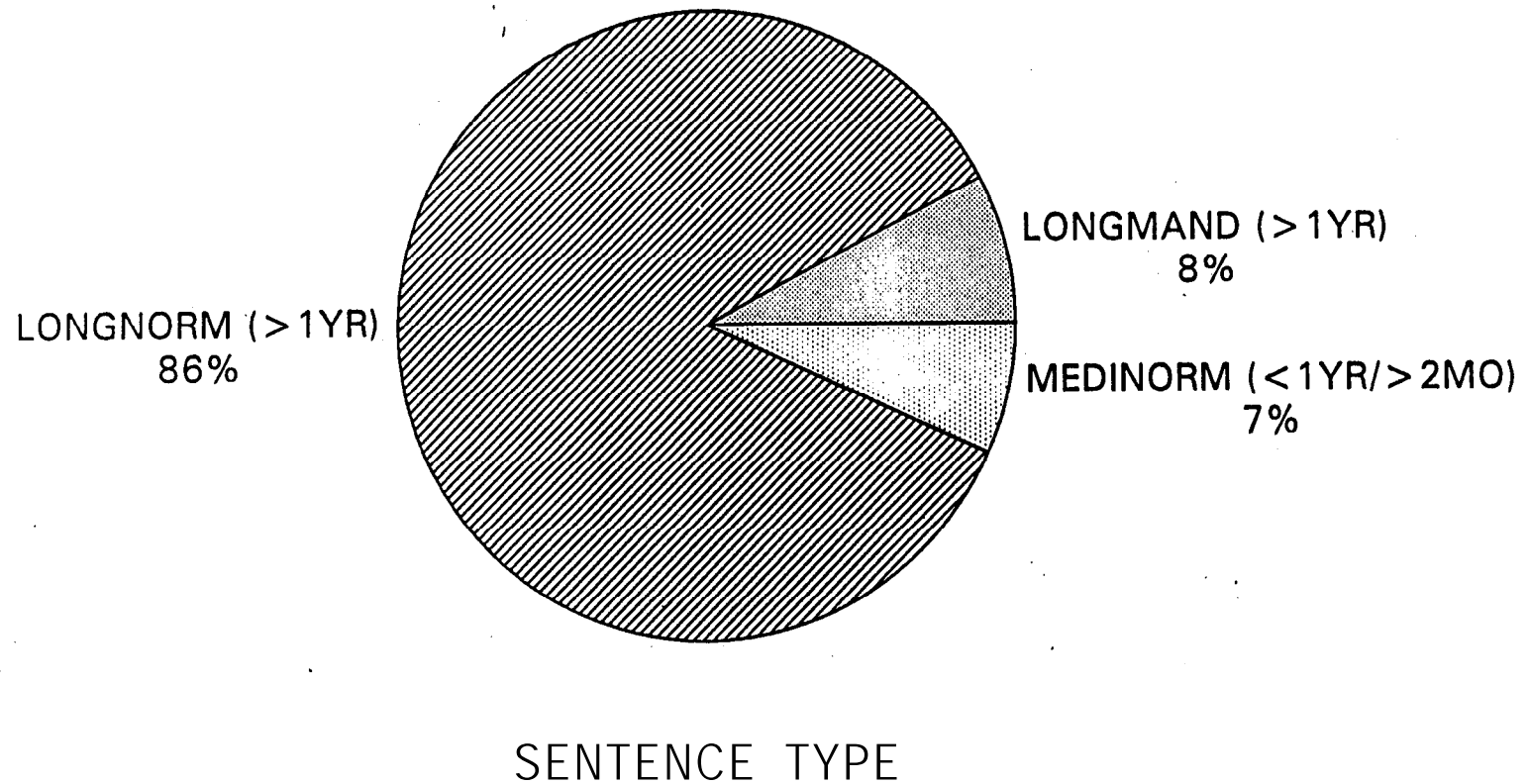
Data was also entered into the model according to gender and type of release from prison. Table 4 and Figure E illustrate the sentence types by gender and by exit type. Other than the greater percentage of mandatory sentences among males, Figure E shows little difference in the way males and females were classified by prison status. But Table 4 reveals important differences in overall sentence and length of stay between males and females. This is especially evident for mandatory and non-mandatory sentences of more than one year ("LONGMAND" and "LONGNORM" groups), where clearly males receive longer sentences and therefore remain incarcerated longer. More will be said about this gender

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FIGURE C
CDOC SENTENCED ADMISSIONS
CY 1991

LONGNORM (>1YR)
38%

LONGMAND (>1YR)
3%

SHORTNORM (<2MO)
27%

MEDIMAND (<1YR/>2MO)
2%

MEDINORM (<1YR/>2MO)
27%

SHORTMAND (<2MO)
4%

SENTENCE TYPE

Source: CDOC

FIGURE D
CDOC SENTENCED POPULATION
1/1/92

LONGMAND (>1YR)
8%

LONGNORM (>1YR)
86%

MEDINORM (<1YR/>2MO)
7%

SENTENCE TYPE

TABLE ....
EXIT TYPES AND LENGTH OF STAY FOR MALE INMATES
CY 1991

OFFENSE TYPE	FURLOUGH N	AVERAGE PRISON SENTENCE (mos)	LOS (mos)	HALFWAY HOUSE N	AVERAGE PRISON SENTENCE (mos)	LOS (mos)	PAROLE N	AVERAGE PRISON SENTENCE (mos)	LOS (mos)	SHR N	AVERAGE PRISON SENTENCE (mos)	LOS (mos)	DISCHARGE N	AVERAGE PRISON SENTENCE (mos)	LOS (mos)
PERSON FEL	105	53.4	31.2	93	61.4	28.6	15	114.4	31.8	234	28.4	7.6	218	38.7	22.4
PERSON MISD.	21	10.6	4.2	10	19.8	8.7	0	NA	NA	159	12.3	2.4	154	7.7	3.3
PROPERTY FEL	50	25.3	15.3	47	30.9	8.4	0	NA	NA	443	24.0	6.3	215	21.9	13.4
PROPERTY MISD.	21	9.0	3.5	11	20.6	6.4	0	NA	NA	125	12.2	2.7	266	5.3	1.9
SUBSTANCE ABUSE FEL.	56	33.1	18.9	73	40.6	14.4	2	39.0	19.1	996	27.8	6.8	239	24.7	14.7
SUBSTANCE ABUSE MISD.	51	3.8	1.8	4	10.5	NA	0	NA	NA	141	6.9	1.6	130	4.3	2.3
PUBLIC OFFENDER FEL	32	18.6	10.4	22	22.1	5.8	0	NA	NA	163	22.4	6.6	85	15.9	9.0
PUBLIC OFFENDER MISD.	24	8.0	2.9	4	14.3	4.6	0	NA	NA	148	48.0	27.2	260	5.4	2.0
UNCLASSIFIED	9	30.7	16.8	9	63.3	27.8	0	NA	NA	109	22.2	6.2	46	23.1	15.2
PROBATION VIOLATORS	62	14.5	7.7	37	22.5	6.2	1	42.0	21.0	488	15.4	3.2	264	12.6	6.8
OVERALL	431	26.2	14.8	310	40.4	15.6	18	102.0	29.8	3,006	23.3	6.2	1,877	9.8	5.4

TABLE 4B
EXIT TYPES AND LENGTH OF STAY FOR FEMALE INMATES
CY 1991

OFFENSE TYPE	FURLOUGH N	AVERAGE PRISON SENTENCE	LOS	HALFWAY HOUSE N	AVERAGE PRISON SENTENCE	LOS	PAROLE N	AVERAGE PRISON SENTENCE	LOS	SHR N	AVERAGE PRISON SENTENCE	LOS	DISCHARGE N	AVERAGE PRISON SENTENCE	LOS
PERSON FEL.	1	18.0	8.1	6	49.5	22.0	1	120.0	58.4	33	22.9	3.9	5	26.6	13.4
PERSON MISD.	2	12.0	5.5	0	NA	NA	0	NA	NA	17	18.0	10.0	10	6.4	2.6
PROPERTY FEL	8	27.6	16.5	4	27.0	8.1	0	NA	NA	36	22.3	3.9	13	17.4	10.7
PROPERTY MISD.	7	19.1	12.3	0	NA	NA	0	NA	NA	29	14.8	2.5	91	4.0	1.4
SUBSTANCE ABUSE FEL	10	24.4	14.8	15	44.4	15.6	0	NA	NA	172	23.6	3.8	26	17.3	10.1
SUBSTANCE ABUSE MISD.	0	NA	NA	16	2.6	0.2	0	NA	NA	2	12.0	2.5	17	2.6	0.9
PUBLIC OFFENDER FEL	7	23.6	12.9	1	36.0	4.2	0	NA	NA	25	16.4	1.9	11	15.5	9.7
PUBLIC OFFENDER MISD.	13	8.0	2.7	10	13.9	4.3	0	NA	NA	56	13.0	3.4	100	36.0	20.3
UNCLASSIFIED	0	NA	NA	1	30.0	6.1	0	NA	NA	8	16.5	1.8	6	12.3	2.7
PROBATION VIOLATORS	8	14.4	7.1	7	12.0	2.3	0	NA	NA	92	17.2	4.0	52	10.7	6.0
OVERALL	56	18.3	10.1	60	23.4	7.9	1	120.0	58.4	472	19.6	3.8	331	12.0	6.6

Source: CDOC 1991 Sentence discharge data

FIGURE E
CDOC SENTENCED ADMISSIONS
CY 1991

LONGNORM
38%

MEDIMAND
2%

MEDIMAND
0%

LONGMAND
3%

MEDINORM
26%

MEDINORM
35%

SHORNORM
28%

SHORMAND
4%

MALES
SENTENCE TYPE

LONGNORM
40%

LONGMAND
1%

SHORNORM
21%

SHORMAND
3%

FEMALES
SENTENCE TYPE
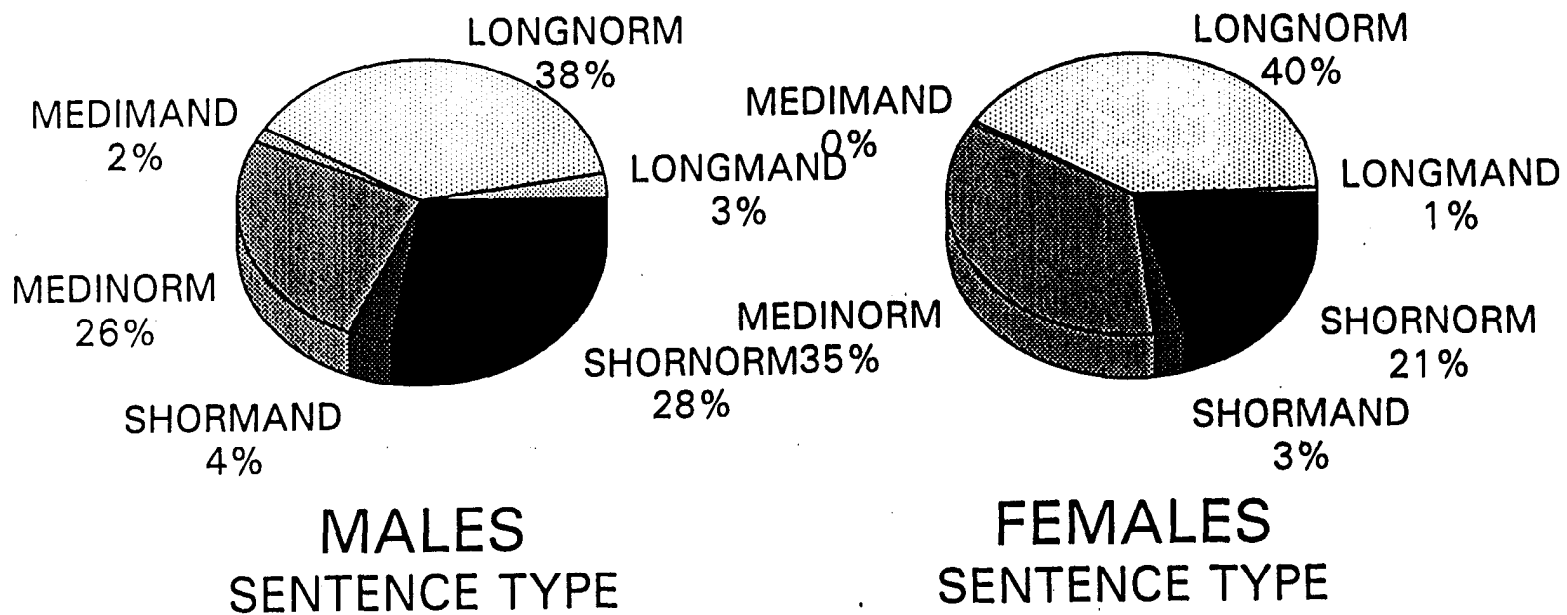
Source: CDOC

difference when projections for both sexes are explained in the next section.

V.   PROJECTION RESULTS

A.   KEY BASE PROJECTION ASSUMPTIONS

As in all projection models, certain assumptions must be made to generate projections using PROPHET. Most of these relate to specific legislation regarding community releases to go into effect on July 1, 1993. In addition, an assumption had to be made as to the number of annual admissions, and the profile of these new commitments into the system over the next ten years. This section summarizes the assumptions made in generating the ten year base projections.

Admissions Assumptions:

- The base projections assume a constant annual admission stream of 9,745 new court sentenced offenders into the Connecticut correctional system over the next ten years.

- The characteristics of these new commitments as reported in the previous section will not change over the ten year period from the characteristics of the 1991 cohort.

Policy Assumptions:

- After July 1, 1993, persons serving sentences of one year or less will serve 50 percent of their sentence behind bars, less good time, before release to a DOC approved community program.

- After July 1, 1993, the parole board will hear 90 percent of the cases where persons have effective sentences greater than one year

after they have served 50 percent of their sentence, less good time.,

- After July 1, 1993, the parole board will grant parole in 70 percent of these cases heard.

B.   HIGHLIGHTS OF THE TEN YEAR FORECASTS

The base projection forecasts a steady increase in the sentenced inmate population over the next decade. Table 5 presents a summary of the CDOC sentenced population projections through the year 2001. Figure F presents a graphical representation of the projected sentenced inmate population. By June 1995 the sentenced population is expected to grow to 12,489 and to reach 14,000 by the end of the century.. Though the population is expected to increase over the ten year period, it will do so at a decreasing rate as the annual percentage change column reveals in Table 5.

Exhibit B and figure G show the projected figures broken down by gender. The number of sentenced males in the facilities, which in 1991 represented 94 percent of the existing prison population, is projected to increase at the same rate as the total population over the ten year period, reaching 13,000 by June of the year 2001. The female population will grow over the first period of the projection from 1993 to 1995 at a 'faster rate than the total population then remain at the same level fluctuating around 1,100 inmates. Differences between the female and male population projections are due to the effect of the elimination of SHR as a release mechanism. As was shown in section IV of this report, females receive shorter sentences than males do. Until July 1,

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FIGURE F
CDOC PRISON POPULATION
SENTENCED INMATES

Population (Thousands)

Quarter / Year

Historical (CDOC)   Projected (NCCD)

Source: Connecticut DOC / NCCD Prophet

TABLE 5
CDOC HISTORICAL AND PROJECTED SENTENCED POPULATION
1988-2001

MONTH/YEAR	FACILITIES		COMMUNITY		TOTAL SUPERVISED	
	N	% CHANGE	N	% CHANGE	N	% CHANGE
HISTORICAL						
JUNE 1988	5,205	NA	2,595	NA	7,800	NA
JUNE 1989	6,319	21.4%	4,192	61.5%	10,511	34.8%
JUNE 1990	7,505	18.8%	6,432	53.4%	13,937	32.6%
JUNE 1991	8,947	19.2%	6,627	3.0%	15,574	11.7%
JUNE 1992	9,024	0.9%	6,049	−8.7%	15,073	−3.2%
PROJECTED						
JUNE 1993	10,003	10.8%	4,363	−27.9%	14,366	−4.7%
JUNE 1994	11,859	18.6%	2,917	−33.1%	14,776	2.9%
JUNE 1995	12,489	5.3%	2,848	−2.4%	15,337	3.8%
JUNE 1996	12,989	4.0%	2,751	−3.4%	15,740	2.6%
JUNE 1997	13,301	2.4%	2,739	−0.4%	16,040	1.9%
JUNE 1998	13,458	1.2%	2,744	0.2%	16,202	1.0%
JUNE 1999	13,684	1.7%	2,787	1.6%	16,471	1.7%
JUNE 2000	13,999	2.3%	2,770	−0.6%	16,769	1.8%
JUNE 2001	14,123	0.9%	2,845	2.7%	16,968	1.2%

NOTE: PROJECTIONS ASSUME A CONSTANT ADMISSION OF SENTENCED INMATES

SOURCE: HISTORICAL DATA - CDOC
        PROJECTIONS - NCCD (PROPHET)

FIGURE G
CDOC PROJECTED FACILITIES POPULATION
June of Each Year

Population (Thousands)

Legend: Sentenced Males, Sentenced Females

Source: NCCD (Prophet)

SAMPLE PROPHET OUPUT

TOTAL PRISON POPULATION

YEAR	MARCH	JUNE	SEPTEMBER	DECEMBER
1992	8,866	9,185	9,254	9,598
1993	9,814	10,003	10,728	11,215
1994	11,584	11,859	12,028	12,208
1995	12,365	12,489	12,638	12,745
1996	12,912	12,989	13,117	13,142
1997	13,245	13,301	13,355	13,238
1998	13,401	13,458	13,530	13,573
1999	13,645	13,684	13,792	13,874
2000	13,908	13,999	14,049	14,064
2001	14,172	14,123	14,222	14,227

MALE PRISON POPULATION

YEAR	MARCH	JUNE	SEPTEMBER	DECEMBER
1992	8,249	8,499	8,519	8,783
1993	3,954	9,124	9,718	10,119
1994	10,454	10,721	10,890	11,080
1995	11,220	11,350	11,509	11,586
1996	11,753	11,850	11,989	12,050
1997	12,128	12,179	12,252	12,132
1998	12,306	12,356	12,444	12,490
1999	12,575	12,627	12,733	12,813
2000	12,868	12,929	12,958	12,969
2001	13,051	13,001	13,109	13,138

FEMALE PRISON POPULATION

YEAR	MARCH	JUNE	SEPTEMBER	DECEMBER
1992	617	686	735	815
1993	860	879	1,010	1,096
1994	1,130	1,138	1,138	1,128
1995	1,145	1,139	1,129	1,159
1996	1,159	1,139	1,128	1,092
1997	1,117	1,122	1,103	1,106
1998	1,095	1,102	1,086	1,083
1999	1,070	1,057	1,059	1,061
2000	1,040	1,070	1,091	1,095
2001	1,121	1,122	1,113	1,089

1993, individuals released to SHR are released after serving 25 percent of their sentences if the offenses were committed prior to 10/1/91, and at 40 percent of their sentences if the offenses were committed after that date. After July 1, 1993, these individuals will be released to community programs other than SHR at 50 percent of their sentence if they are serving terms of one year or less, otherwise they will be eligible for parole at 50 percent-of sentence. This policy change therefore seems to stack up the male population more than the female population, because of the differences in sentence lengths between the two groups.

Projections for the DOC community populations also modeled by PROPHET, are presented in Figures H and I and in Table 6. Overall the community population is projected to decrease in size as a result of the proposed legislation to eliminate SHR. By June 1994, the community population is expected to decline to the level observed in 1988. Results of the simulation show the SHR population declining to under a hundred individuals by the fall of 1997, and average annual decreases of 50 percent over the projection period for this population.

The state parole population will increase substantially the first two years then remain at about 6 percent annual growth for the rest of the period. The alternative release mechanism to SHR for those with shorter sentences is termed "community release" in Table 6, and is projected to be comprised of 700 to 750 individuals a year,

FIGURE H
CDOC COMMUNITY AND FACILITY POPULATIONS
June of Each Year

Population (Thousands)
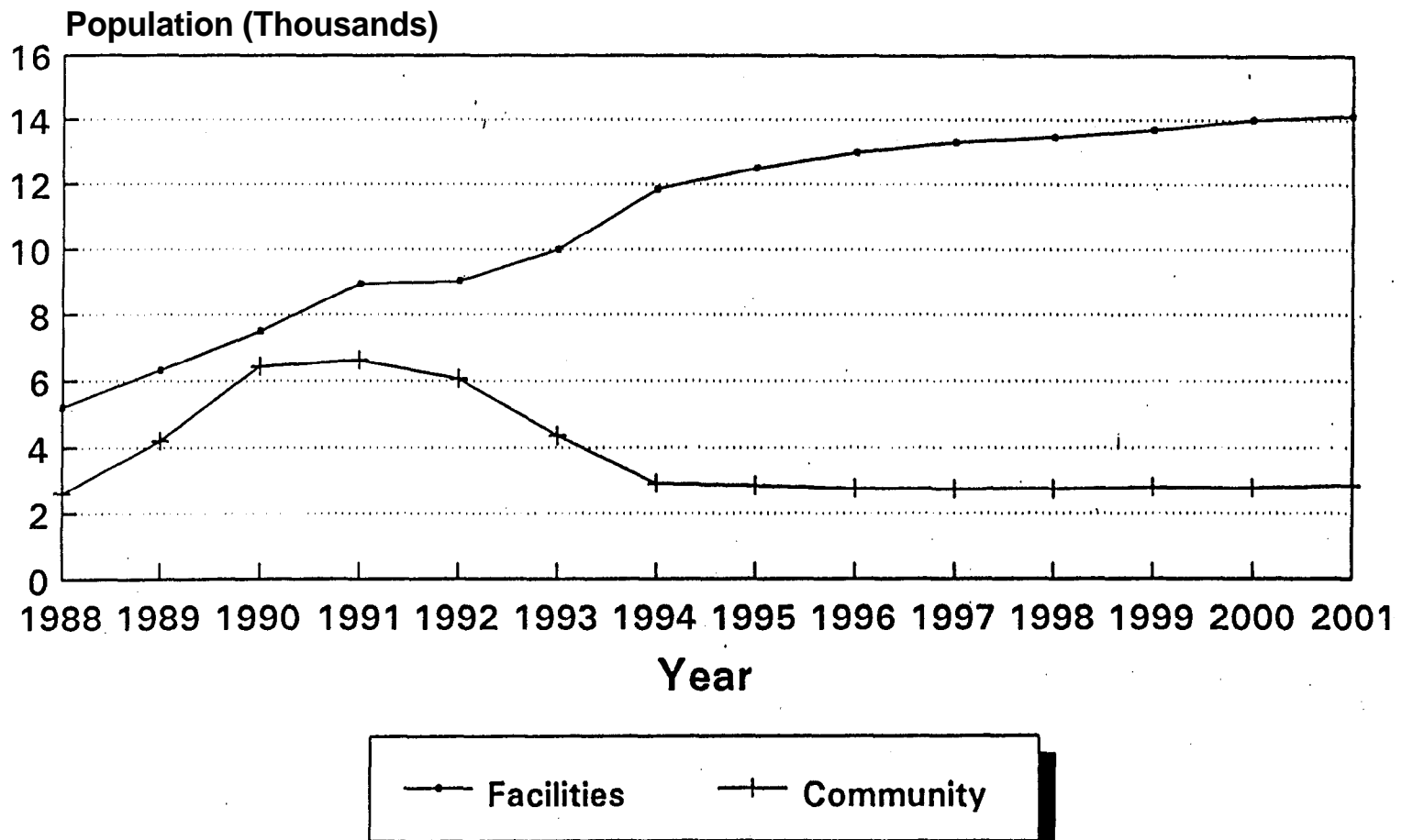
Source: Connecticut DOC / NCCD Prophet

FIGURE I
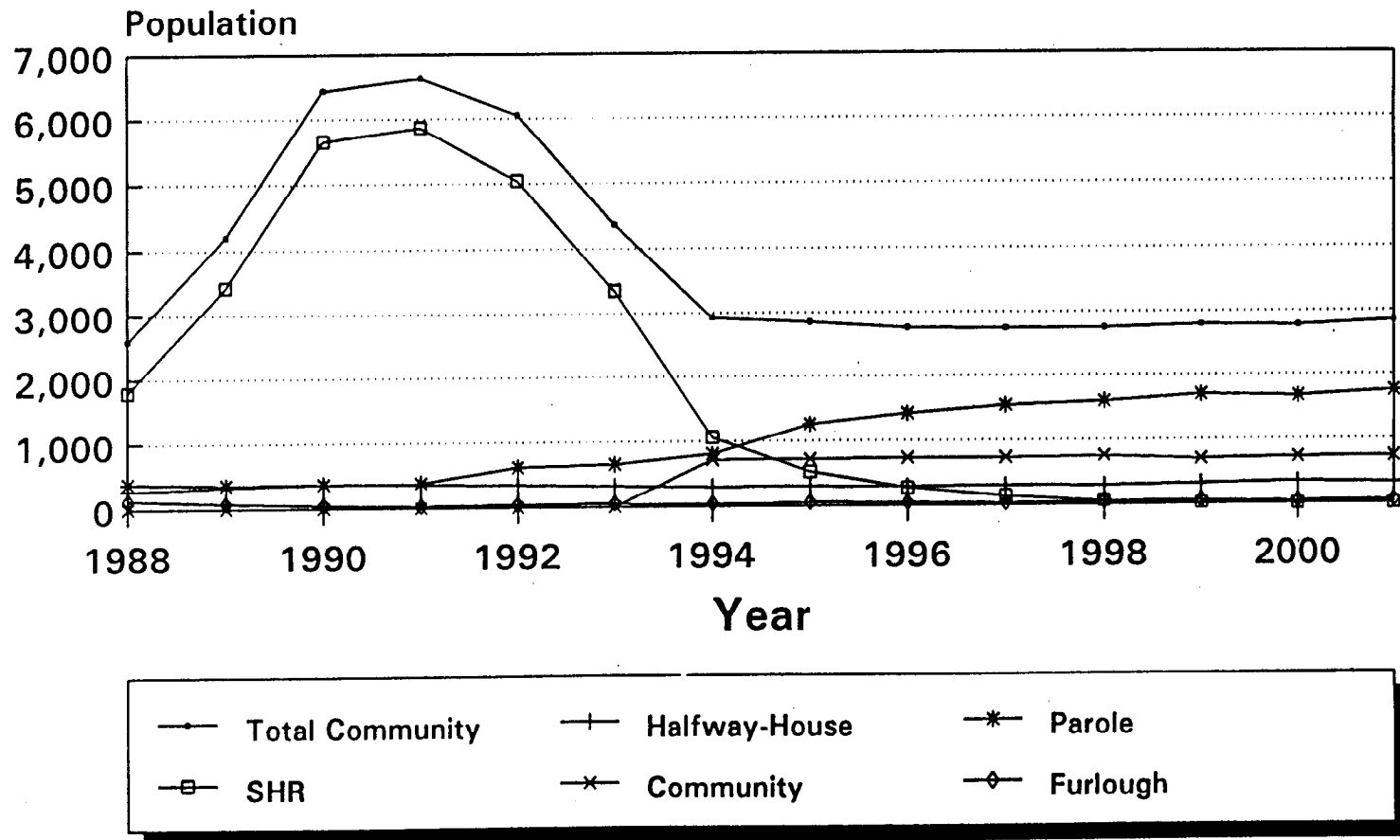## CDOC SUPERVISED POPULATIONS
June of Each Year

TABLE
CDOC HISTORICAL AND PROJECTED COMMUNITY POPULATIONS
1988-2001

COMMUNITY POPULATIONS

MONTH/YEAR	FURLOUGH		HALFWAY HOUSE		PAROLE		SHR		COMMUNITY RELEASE	
	N	% CHANGE	N	% CHANGE	N	% CHANGE	N	% CHANGE	N	% CHANGE
HISTORICAL										
JUNE 1988	131	NA	286	NA	387	NA	1,791	NA	0	NA
JUNE 1989	82	−37.4%	332	16.1%	360	−7.0%	3,418	90.8%	0	NA
JUNE 1990	44	−46.3%	371	11.7%	366	1.7%	5,651	65.3%	0	NA
JUNE 1991	28	−36.4%	358	−3.5%	381	4.1%	5,860	3.7%	0	NA
JUNE 1992	46	64.3%	345	−3.6%	616	61.7%	5,042	−14.0%	0	NA
PROJECTED										
JUNE 1993	50	8.7%	317	−8.1%	653	6.0%	3,343	−33.7%	0	NA
JUNE 1994	40	−20.0%	296	−6.6%	806	23.4%	1,062	−68.2%	713	NA
JUNE 1995	53	32.5%	297	0.3%	1,258	56.1%	521	−50.9%	719	0.8%
JUNE 1996	43	−18.9%	288	−3.0%	1,421	13.0%	270	−48.2%	729	1.4%
JUNE 1997	27	−37.2%	304	5.6%	1,541	8.4%	138	−48.9%	729	0.0%
JUNE 1998	42	55.6%	292	−3.9%	1,599	3.8%	60	−56.5%	751	3.0%
JUNE 1999	59	40.5%	315	7.9%	1,697	6.1%	17	−71.7%	699	−6.9%
JUNE 2000	37	−37.3%	339	7.6%	1,670	−1.6%	2	−88.2%	722	3.3%
JUNE 2001	48	29.7%	321	−5.3%	1,748	4.7%	0	−100.0%	726	0.8%

SOURCE: HISTORICAL DATA - CDOC
       PROJECTIONS - NCCD (PROPHET)

VI. CONCLUSIONS AND RECOMMENDATIONS

In other jurisdictions where NCCD does projections work, two trends have been observed that may have implications for CDOC populations. First, the overall volume of admissions has begun to abate over the past two years. Secondly, the number of drug offender commitments appears to be leveling off or declining. Should a declining trend in correctional admissions be detected in Connecticut, the projections should be revised to incorporate this trend.

Any forecast is based upon assumptions about the future and will contain an implicit level of error. The consequence of error in overestimating prison populations initially may allow for some consolidation of existing facilities but eventually could translate into millions of dollars in unnecessary construction costs. On the other hand, the consequence of error in underestimating prison populations increases the potential severe crowding at all levels of the system. Underestimation can also lead to costly emergency construction programs carried out under less than ideal conditions.

The PROPHET model specifically designed for the Connecticut Department of Corrections enables officials from this state agency to plan for future offender population changes. It is strongly recommended that the model become an integral planning tool for testing proposed sentencing options and their likely impact on future DOC operation. The current model, in- projecting the impact of legislation eliminating SHR demonstrates how testing can be carried out. Because of the complexity of the Connecticut

correctional system, the model described in this report demands a great deal from its user in order to produce accurate policy simulations or projections. CDOC staff will require ongoing technical assistance, at least in the short term, to ensure the full and accurate utilization of the model's features, including legislative and policy impact development. It is recommended that a staff person be assigned the responsibility of maintaining and operating all aspects of the PROPHET model including the accurate loading of model data, database development and monitoring, prisoner group movement and tracking, and the production of the annual or semi-annual updates of long-term projections. Since the model was loaded with CY 1991 data, an update to the present model using more recent data should be carried out soon.

The continued development and enhancement of the CDOC planning database is an important part of the forecasting process. A set of "extract" files identical to those produced for this project should be created, saved and updated on (at least) an annual fiscal year basis for all admissions and releases. Separate files containing important characteristics of all supervised populations should also be updated each year. Formal documentation should be generated each year by the forecast team that compares current and prior sentence group composition, sentence lengths, parole board grant rates and other components affecting length of stay. If projections change, once the model is updated with new data, the reasons for the changes should be understood and articulated to the users of the forecast.